

Fig. 1

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METHODS RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

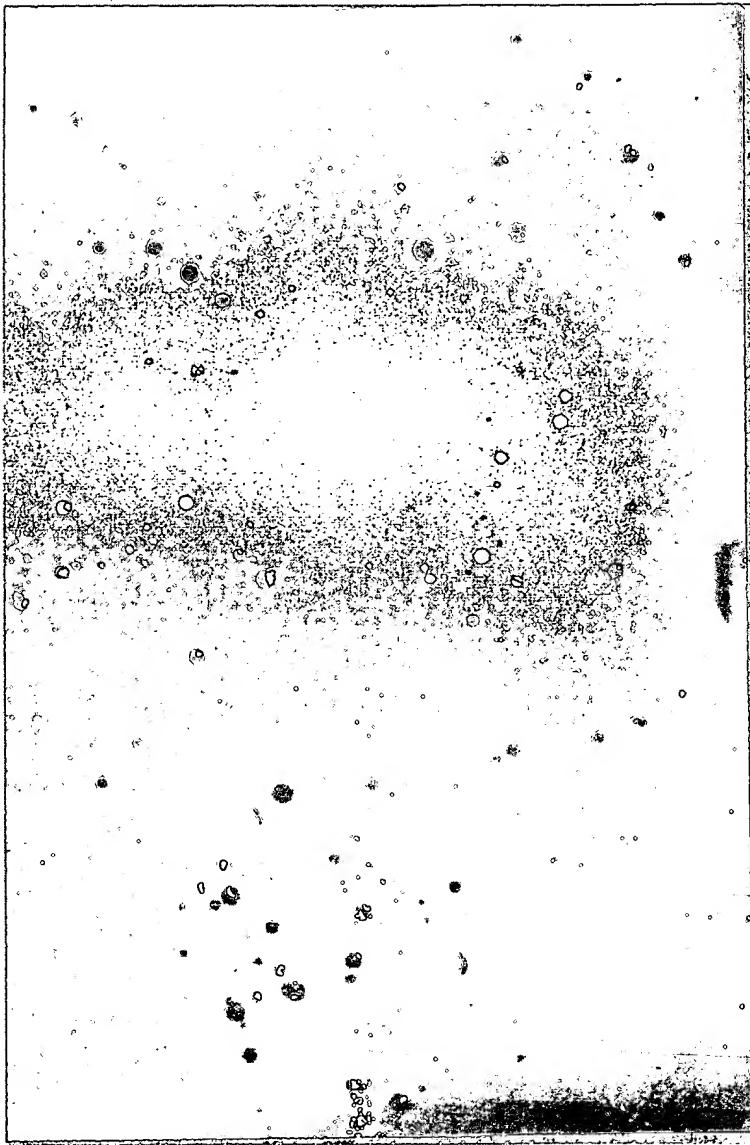


Fig. 2

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

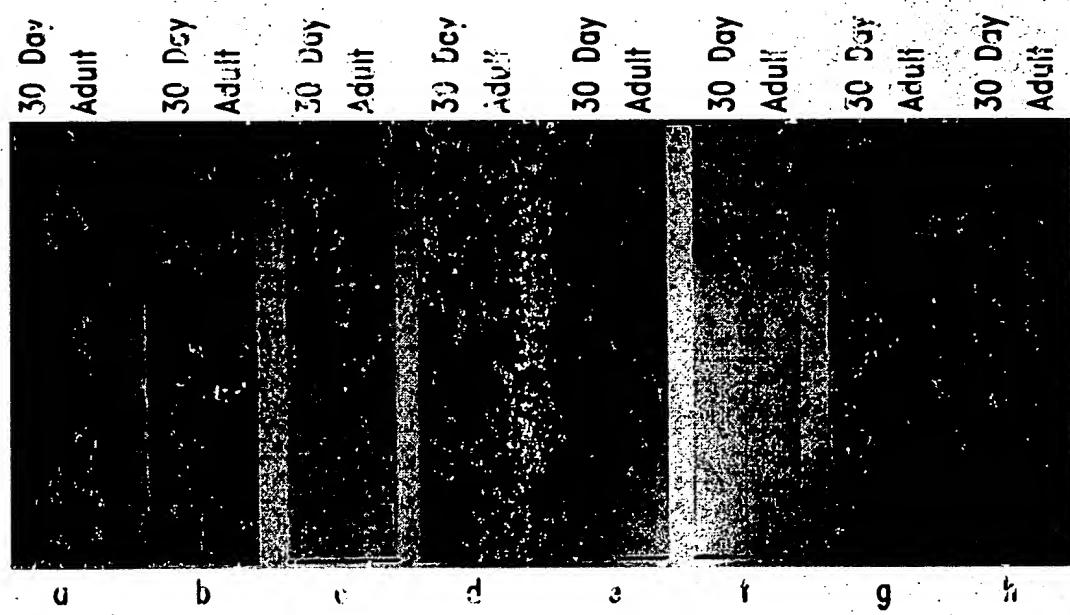


Fig. 3

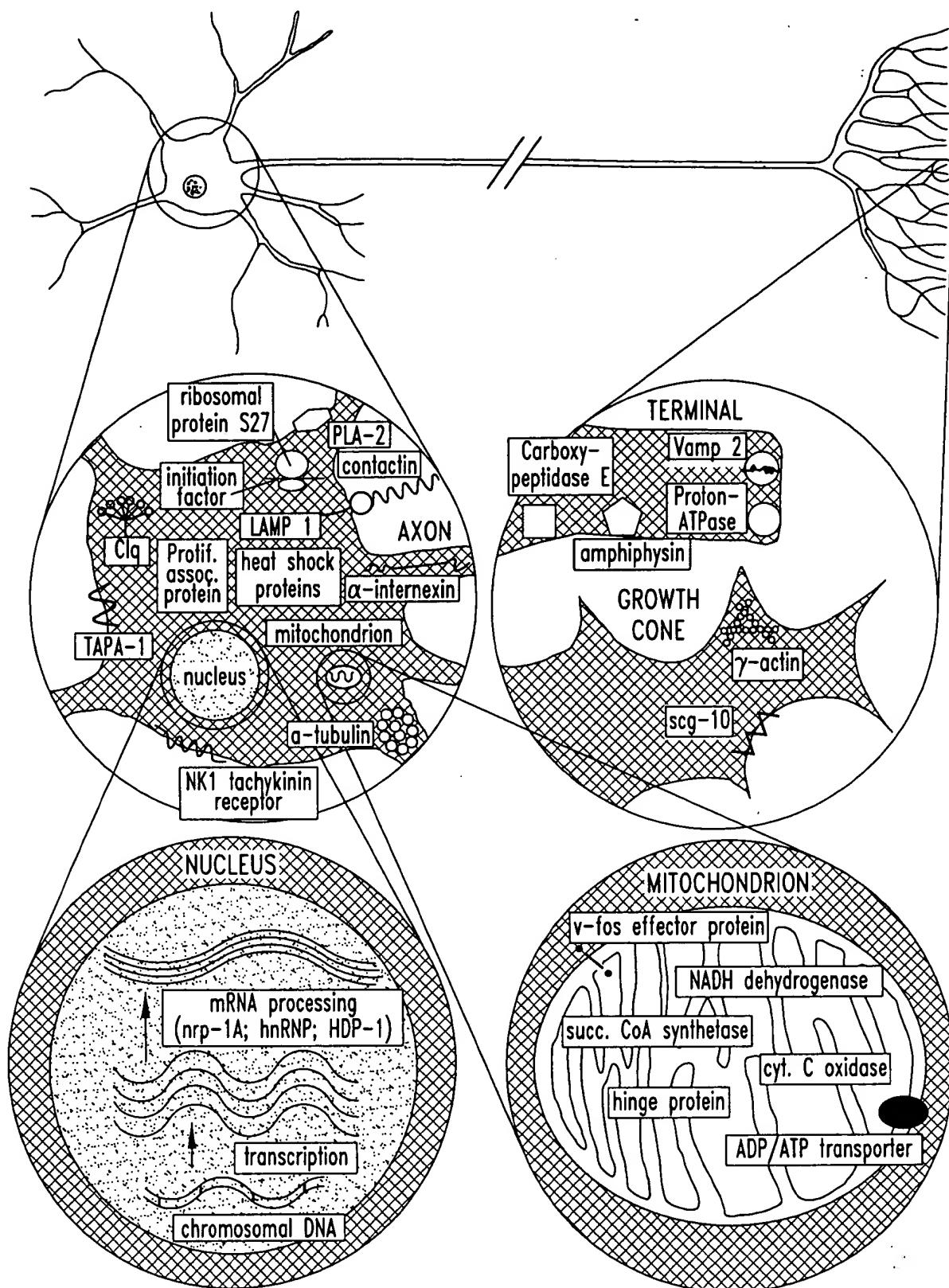


Fig. 4

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 1

pKVC43:

CCTGGCTGCCTGTGCCTCAACCCCACTCCCAGGGAGACCAAAAGCCTTCATACATCTGAA AT

SEQ ID. NO.: 2

pKVC2B:

GCGACGGACGAGATGTCTCGGTGTCCTTGCCTCGCTACCAAGGTCAAAATGCAAATCTCGTAAAAAC
CCTGACgGGCAAGACCATCACCC

SEQ ID. NO.: 3

pKVC15:

TTTTTTTAATTGAGAAAGACATAATGGTTATGGCATTGGCTTGAACCCAGTTAACACCGTTCGATT
CCTTCCTTCTTATTTAATAGTACGTtAAGTTGGCTTCAAAT

SEQ. ID. NO.: 4

>pKVC24BR

poly(T)ATCCATACTGCTATTATTTAGGCTTAGTTGGAAACAAAGGNCAAGAGTTAAAAAAAT
GCCAACATTCAGGACCCTTGTT

SEQ ID. NO.: 5

pKVC26B:

CTTCCCCACTCATCCCTGCTCTGGCCCTTGTgCCCCCTGGCCCTTACCCCAAGCACCACCCACAG
ACTGGGGACCAGCCCCCTCCTGCCTATGTCTCgCCCCAAAT

SEQ ID. NO.: 6

pKVC50B:

CCTTCCCTCCTACTTAATAGTCGGTAGTACGGANGTTAAATCTTCAGGTGGTACGCAGCCG
GGCAACCATGCAATGGATTNAAGGTNGGTATGGTACAATTGGCCTATGCCCACTT

SEQ ID. NO.: 7

pKVC85B:

CTTAGAGCGCACTCAGGGGACTTGNAAGGGCTTCACGAGCGTGGCTGGCCATCTGTGGAAAGA
GCTTCTCGCAGTGNCTGGTNGNNTTATCCCCACGCCNTAGNGCACTACTC

SEQ ID. NO.: 8

pKVC100:

TTAGTTCACATTCAAGGGGCTTATGAAGAGATGCAAGTCAGGATACTAGGCTTGATT
TTGGCAGCTTAATGAGTATTCACtGAGGCACtG

SEQ ID. NO.: 9

pKVC94B:

CCGCCTGATATAGACACTTCGTAGAGCGTAGTTGACTATTCTATACGTTCTATTATTGATGAGGA
TCCTAAA

Fig. 5A

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 10

pKVC90B:

TTTATTATGCACACGTTCAAATAAACCAGTGTGGGATGTTAAGACTATCAATTAAATGGTGGGATTA
TGTTTGGCATTTTATTNNNTATAAATATATTTTCTGAATGTGTCTGAGNTCCAAGAGGTTGGG
GGNGGGGGNG

SEQ ID. NO.: 11

pKVC91B:

TTTCCTTGGGTTGCTGGTTGGATTAATCTTAATAACAATATAGAATTGAGACTGATGTTTAGTG
TTTTCCAACACACAAACATAAAAACAAAGTCGGACCGCTACTTCTGTGAAATCAAGATCNTT
GGGGAA

SEQ ID. NO.: 12

pKVC101B:

CCTGGCCAGCGGGCAGGGCACGAAGGCAAGATCGGTGTTGTGTTTCCAAGGAGACGANCC
NATNANCTGAAATATGTACACGNTCTGTGTGTCCTCGNGGNAGG
ATGGTCGGNTCTATTTAA

SEQ ID. NO.: 13

pKVC103fb:

CCAAAATATTTGGGCCAAATGTTCCGAGGATGAGTCAGGCTGTCCTCGCGCGGGCGAGACGAAGCT
TCACACGGGACAAGATGGGATGGGTTGGAGGAATGGATGGTCCCCAAACA
ATGGGCTTANAANAATTAT

SEQ ID. NO.: 14

pKVC105:

TTTACTGACAAGCATGGGAAGTGTGCCAGCTGGCTGGAAGCTGGCAGTGATACCATCAAGCCTGATG
TCcAGAAGAGCAAAGAATATTCTCTAACAGCAGAAGTGAGCGCTAGGCCTTT

SEQ ID. NO.: 15

pKVC107:

CGGCTTCCTGGCTTATCGTATGAGCCATCACATGTTACTGTAGGAATGGATGTAGACACACGAGC
ATACTTACATCAGCCACTATAATTATTGCCATTCCtACCGGGGTGAAAGT ATTTAGTTGACT

SEQ ID. NO.: 16

pKVC1B:

GGAGCTTGAAGAAGAAGTTTTTACCAACCGTCTTTCTACTTATACAGAAGTAGATATTCTGCGAA
GAAGAATAATTGGGTAATATGCAAGCTAGTAGATGTGGCACAGCAAATC ATATAATAA

SEQ ID. NO.: 17

pKVC5B:

ACCCACCCAGAGCCTGGAATCAGGATCCCAGGGTCTAGCCAGCCTGGGTCCAGAACCCAGAACATCCAG
CCTGTCTGAGCTGGACCTAGCAGCCAGAGTCTAGCCAGCCTCGCTCCAAGAGGGGCTCTGGTGCCTA
GGTAGACAGGCCTGggTGGGATCAATGAGTTGGTGTAGGCCAGGGCACCTGACTCTGCTCCATAC
TG

Fig. 5B

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 18

pKVC7:

CACCTTCTGAAACACCTGTGGCTTGACTTGTATTGATCCAGATTATTCTCCTGCATTGGGAAA
ATATCTTCATATTCAGTAAAGGATGGTTGCGAGAGTAAGTTAATGTCAGAACAAACTGCCAAT
ACAAGAGCCCAATGATATTACATGAGAAAAaGTAACTA ATACATCC

SEQ. ID. NO.: 19

>pkvc55R

GAGAAAGAAAGAGATGTTTATTAGCATTGTTACAGCAACGgTGACGTGAAGGGTGTCCGTGCACAG
CCACCGAGCGGCAAGGCAGGGCTAGGCCAGAGCTGACACCCAGTATTACAGAGTGCAGAACAGGATCACC
CCGAACCTCAAACAGAAGACTGAAAGTCACTTACAAAAAGGTAATAAAAA

SEQ ID. NO.: 20

pKVC13B:

GCTACGGTCGACATCACCATCTTATCCCTTCCAGCCCTTGCTGGTGCAGGGCCTGGGAAGATGCC
AAAGAGCCGAGCAGTGGTGGCCAGCGGGCAGAGTGTCCCTGCTGGGCCAGGAAAGCTTACCTC
TCTGAGCGCCTCTGCTGAGAGATCGATGGTCTGTGGCTCA GGAGACCACGTCTGGAGTG

SEQ. ID. NO.: 21

>pKVC6R

poly(T)CCTTCTTATTGAATGACTTCAAGAgTAATTACAGTTGAAGGTGACAAGTTAGAAAGGAG
AGGTGCCACTGAAGGCATAAGGCTGTTAGACCCGGCTCTAGACAAGTGGCAGGAGAAGAAAGAGGG
TTAAAAAAGGCATGAGCGTGCAGCCCACGGGCA

SEQ ID. NO.: 22

pKVC16B:

GGCAGCACTCCTATTAAACTGGAACCTACTGAGGTTCTCGTGTATTAGGAACAGAGAACACgt
tCCACGAGGGAGCCTCCAGGTCTAATTACCTGCAACCTCGCTGTACCTGCTGGCAGGAGGGAGCCAC
CAATAGCAATTACTAACGAATGGCTGAATTCTTATAAGACCTAGGGAACCTGATGGGAAACTGAATT
GCTAA

SEQ. ID. NO.: 23

>pKVC74F

TTTTTTTTTTTAATTTTTAACGTTATTATTTGAGACAGAGAGAGACAGAGCATGAACGGG
GGAGGGGCAGAGAGAGAGGGAGACACAGAACGAACTGGAGATGCTCAGGCTCTGAGCCCATCAGCCCAGA
GCCGACGCGGGCTGAACTCACGGACTGTGAGATGTCACCTGAGCGAAGTCAGACGCCAACCAAC
TGAGCCACCCAGGCGCACCATC

SEQ ID. NO.: 24

pKVC29B:

CCAGGTGACAGGGAGCCTGCAGGGAGGGTCTGGGTGTTCCCAGGAGCCAGGGGAAGTGGGAATGGTGCA
GGCAGTATTGGAAGGAAGGCCAGTCAGTGGACTGGCAGCTCAGACAGGCAATATGGGAAGCATTGGA
GCTTGCAGTCTCACTCTGGGTTAGGGGTTGCACACTCAGCAATAAAACTGTGTACACACCAAAATC
CTAAATATATCACTACAAA

Fig. 5C

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ. ID. NO.: 25

>pKVC79R

pol y(T)GTGTTAAGTGGCTTTATTGGGGTGTACATTAGGTTATCTTCTTCATTATCAGTTCTTCAG
TTAATTGTACAAGTATGATAAGTTATTTATATCTGACGTGGAAATTAAATGTAAAATAAACAAAA
TACATCTGTGGTTAATGAACACTCAATGAAGAC

SEQ ID. NO.: 26

pKVC30:

ACAAACAACGTGAGGTGCTTTGTGTGGAGTGTGTGGATCTGTTGGTGGGGCCGGGGGCCAGGAC
TCAAGGAGGACCCCTGGAACGTACATGTGCGGGCACAGGGCACCTACGGGCTGCTGCGGCGGCGGG
ACGACTGGCCCTCGCGCTGCAGATGTTCTTGCCAATAACCACGACCAGGAGTTGACCCCTCCGAAGT
TTACCCA

SEQ. ID. NO.: 27

>pKVC7R

pol y(T)ACACAGAACAAAGAAATTTATTATCTGAATGCTGGTCATAAgCAATAACAAGCTCATCAA
TTAGAGGAGGAGACAGAGGGAAACTCAGATACTGATGAGGATTCTGGCAGGTTAAAACCTTAAA
GATTGAGGCCATAATTGttCAGTCTTTTTT

SEQ ID. NO.: 28

pKVC32B:

CCTGCCAACGGCGAGGCTCCACAGGAATCAGAGTTGGACGACNNNNGAAGGAAGCGTTGGCTTCAC
ATTCTAGAGAAAGAACCCCTACTGGCTGCAGACCCCTCCAGGGCTGTAGGAAAGCTGCTGGACCTCT
TCTGCTCTCCCAACCACTCTGCCACTCTGCCAGTTACCAAG TCACCAAG

SEQ. ID NO.: 29

>pKVC45BR

TTCAGAACATGTTTTTTTTTTTTAATTGTTGGTTGTTTGTAAATTAAAGAAAGGT
ATTTGCTTGAGGAAAAAAACTCCAGATTCAATTAAATGAGAACATTGAAATGTATTATCTTCTT
GCATTGGGCAACTTAATGCCTGTTGGCCTCCGGCCTCTGGAAATAAGGTCCAACGG

SEQ. ID. NO.: 30

pKVC34B:

CCTGCCAACGCCATCCTGCGTCTGGACCTGGCTGGCCGGACCTGACGGACTACCTCATGAAGATCCT
CACAGAGCGCGGCTACAGCTTACCAACCACCCGAGCGGAATTGTGCGTGACATCAAGGAGAACGCTC
TGCTACGTGCCCTGGACTTCGAGCAGGAGATGGCCACCGCCGCGTCTCGTCCTGGAGAACAGAGCT
ACGAGCTGCCGAC

SEQ. ID. NO.: 31

>pKVC89BF

ATTGTGATAGAACGACCGGTGGTTCAANCANGTTGAAGNAGTTCCGCNTTCCCTCCGGGGAAAG
GTTGTCGATGTCTNTGGTNNTAAGTANTCACCCATNCATTGTTGACAAGGNTCANTCCGAAGGGTCA
TTCTGAGTAGACCAATATTNTAAAATAATTNAATCCTT

Fig. 5D

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 32

pKVC34:

AATTGAGAAAGACATAATGGTTATGGCATTGGCTGAAACCAGTTAAAGAGGGTCGATTCTTCTTCTT
CTTATTTAATAGTACGTAAGTGGCTCTCAAATGTGTGGTACGGAGGAGGACATCCATGCAATCATT
CAAGATTAGTTGTGGTTAATTCTACTATGCCACTTCTCGCTGGATGCGAAAGCTTCTCACACTATGA
AAA

SEQ ID. NO.: 33

pKVC36B:

ACGCTCGTTTCAAAGAGAAGAGCGTTGTTAGAGTAGCGAAATTGAAGGCTGCTTAGGCGCATTGT
AAAGCTGTTGGGAAATACTCCACAAGTTCGTGAGTGGAAATGTAGTGCTGAAACACATTCTGCTT
TAAAAGGTTGAACAAATACAAACAAATTAAAAAAAGCTCT CGAAAA

SEQ ID. NO.: 34

pKVC43rB:

CTGGAGCGCAAGTACTCCGTGTGGATCGGTGGCTCCATCCCGGGCTTGGTCCACCTTCCACAAGTG
TTGATCACACAAGCCGGAGTACCGCGCGGGTCCGGCCCCCTTCATAGGCCACCGCAAAACTTTAGGC
GGGCTTACNTTAGAGGCGGTACACACCTCTTG

SEQ ID. NO.: 35

pKVC73:

TGGGCATCAAATGAAAGAGATACTTGCAAAGGCTCTTGAGGGGCAGGGAAAGGAAAGGAGGACTGTCTG
CTTGGACCTAAACTGGACAGGGACTAGGTATTTGATGTTATAAGTTGCTCTGCTTAAGTTCAT
TTGAGTAGCAGACCTGACAAGCATTGAGGTCAAAACCTACCATGTGTAAAAAAAAAA

SEQ ID. NO.: 36

pKVC79B:

GTCTGATACAAAGCTCTGTGCTAATCCAGACTATTAGGCAGGGCAATAGGGTGTAAAATGTATCT
GCTCTCTCAAACCGCGCTAANGNTAGTCCATGTCCCNNGCAACCNNAANATCCCACNAGGG
GNAGNTCG

SEQ ID. NO.: 37

pKVC81B:

CCCAAGGTGAACAGGAACAGGTTTCTCATAAAAAACACAAAAATCCTGCCATTCTTCTTACTT
GNATGTGGAAAAATAGATCCGCCCTTATTGNTGAATAGCCTAAACTTTGGAGAATATTCTTAGNA
AATTAGGGGGGGNGGGC

SEQ ID. NO.: 38

pKVC83B:

CATCTAGATANTCTGGNGATTGGGCCTCTAGNTGATTGCTCGAGCGGCCAGTGTGTTAAAGA
CTGGCTCAGGGCCTGTGCGAGGTGCTGCTGGTGGTACCAAGGAGGTGGAGGAAAGGGCTGCTGGNCT
GCGGNACAGTACTGACCCCGCGGAGGTAGTAGCAACCAGGTCCACCGTACCCCTGCGAGTCCCCGCTG
CCAATCCCC

Fig. 5E

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METALS RELATED THERETO
Inventor(s): Max Cynader et al. Serial No: 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 39

pKVC87B:

CCACCAAGAAGCTGGACCTGTGGATGCTGCCTGAGACACTCATTATCCACCTGAAGCGCTTCTCTTACA
CCAAGTTCTCCCGCGAGAAGCTGGATACCCCTGTGGAGTTCCCATCCGGGACCTGGAACCTCTCCGAG
TTTGGCATCAAGTCCGTAGGAACGAGTCGGCTCCGGAGCTGTACAAATACGCATCTCATCGNGGGNTNC
CATCNCATTNATGGGGG

SEQ ID. NO.: 40

pKVC104fb:

GGCGAATTGGGCCCTAGATGCATGCTCGAGCGGGGCCAGTGTGCTCTAAAGCCAAAATATATTGA
GCCAAATGTTCCGAGGATGAGTCAGGCTGTCTCGGGGGCAGNAAAGGCTCACACGGGACAAGTGGAT
GGNTTGGAGGAATGNATGNTCCGCAACCATGGGCT

SEQ ID. NO.: 41

pKVC104:

CTGACTGGCCCAGAATTTGAATACTGGAGGCAGTCTCATTGGCCTCCCTCATTAGACTCCAGGATTG
GGTCCAGCCCCGAGACCCTGTGGCTCCTACCAGTCCAAAAGTCTAGGACCGCTTGCAGACCCAGGAAA
GGAATTTCTAGTGTCTACAAAGGCCAATAGAGAGGGTGGGAGTGGGTGGGTGAGGACCGGTGGCGA
GAGGGG

SEQ ID. NO.: 42

pKVC109B:

GCCAGATTACATAAGAACATGCTTAACAGACGATTTAGCTGACGTCTTACCAAGNAATGCCAAG
TCCGCACGGTAAGTAAAGAGGAGGCCAGGTCAAGAGTTGCTTAGCAATAGGTCAAGTCAGGTCACTAAA
ACTGTAAATCCATTGCGAGAGGGGGACGCCTCCGCTCAAGCT TGGCTGGCTTCCG

SEQ ID. NO.: 43

pKVC89B:

GTCAAAGAGACCAATCCATATCCTCATCTGATTCCCTCGACTCTTCTTGTCAACCTTGGCTGG
GGCTGCAGCAGCAGCAGGTGCAGCAGTGGTGGCAGCGGCCACGGGGGAGCAGCCACAAATGCAGATGG
GATCAGCCAAGAAGGCCATTGGACCTTTCAAGCAAGTGGGAAGGTATAATCAGGTCTCCACAGGACAA
AGGCCAGGACCCGCTTATTTCCATTGGATGGATAGGAATGGGGGGACTGNATGCAAACAGGNCGGGG
TTNACCCTTCTTGNAGGACCATT
TCA

SEQ ID. NO.: 44

pKVC115:

GCGCAGGCACAGCTGGTAGGGCGAGGCCAGACGCCAAGGTGGCCACCATGGTCCGGAGTGCCTGC
AGGTAGTGGCTTCGTACGAGCTTGTGGATGGCATCATCGTCACCACGTCCACCAACGACT
GGGTGGTGACCTGGCTACACCACCTGCCGCAAGCTGGACGAACGGCTCCAAGGGCTGT
GGCAGACTC

SEQ ID. NO.: 45

Fig. 5F

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

pKVC20fB:

CAAACCCATGCATACCACATAGTCAACCTAGCCATGGCCACTTACAGGAGCCCTtCAGCCCTCTTA
ATAACCTCAGGCCCTGGCTATATGATTCACTACAACACTCAACACTGCTGTTAACCTTGGAAATAACTACC
AACCTACTAACTATATCAATGATGACGAGACATTATCCGAGAAAGCACATTCCAAGGCCATCATACA
CCTATCGTTAAAAAGG

SEQ ID. NO.: 46

pKVC7B:

GCGCCCGCCGCGTCGCGCCGCCTCACCGCCGTACCACCCGCCCTCCTGCAACCTCAGCCCACCGG
GGCACCCGGCCCAAGGTCACTGGCGCCCAAGGCAGCTCCTGGAGGAGAATGACCAGCTCATCCGCTGT
ATCGTGGAGTATCAGAACAAAGGCCGGCGAATGAGTGCCTCAGTACCAAGCATGTGTTACACAGAAAT
CTCATTATTGGTACCATCGCAGATGCCAACCCC

SEQ ID. NO.: 47

pKVC92:

AGACCAGCCGGTGACAACCACTAATCAAGTTCCATAACTATATAGCGCCGCAATTCCATGGCCTCCTC
ACTAAAGAACCTGAGTCACCTGTATCATAATCACCAATCACCTGCACCGTTAAACTAAATACGAC
TTCTACCTCATCTCCTTAAATATAACAAGCAGTTAATAATTCTGCTAACACCCCCGTAATAAACAT
TGCTAGTA

SEQ ID. NO.: 48

pKVC8:

TGAGGTTGATTATTGGTGGTATTGTTCACTGTGTAGAAATAGTAGGAGTA
GATTTAAATAGATTGTTCACTGGTATTGTTCACTGTGTAGAAATAGTAGGAGTA
AGCTTTCTGTATTCTAATCTATTGAGAAATTTCTGCTCCCTTTTTAATTGTGCTTACAGTTC
AAGTTGTAGATTTAATAAGCAACAATTTAAAGATGCGGTAACTTCCAACATAATTATCCATC
TTCATGGCCCCACAACACTGCATTTAAT

SEQ ID. NO.: 49

pKVC8B:

CTAACTGCATTCTCTCCTCGTTCATCCTTGGGCTGATTGATGAGCCCTTATTCTTATCTAAAA
ATCAACAGCAAGGTCTACTTCACATGGCCACTCCAGTCCTTGAGCTATAATCAGGATTATATAACTTA
CCCTCAAATCAAAGTTAAGAAAAAGGAAGGCCATAAGCTAAGGCAGTGAATCTTCCTGACAATTTC
TAGAGGTAGAATTCATCATGCTGCAG
AGAAATGAAAGAG

SEQ ID. NO.: 50

pKVC14:

ATAATGGTTATGGCATTGGCTTGAACAGTTAAAGAGGGTCGATTCTCCTTCTTATTAAATAG
TACGTAAGTTGGCTTCAAATGTGTGGTACGGAGGAGGACATCCATGCAATCATTCAAGATTAGTTGT
GGTTAATTCTACTATGCCACTTCTCGCTTGGATGCGAAAGCTTCTCACACTATGAAAACATTAAACAT
GACTGCTGTTAATGAGATGAAAGAGGCCATTGAGGAATCGTATTCAAGTTGTATGCATCTGGATA
GTCAGAATAAC

Fig. 5G

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METHODS RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 51

pKVC16:

TGGTGACACACGTCTTCAGTCACCAGTGGAGATCACCAGGAGCATCAGCAGGAAGAGGCCAGTGGGCC
ACAAGCTTAGCAAGTTGATCAGGATAGGGTATTTGGTGGATAGACCATGAGTGTCAAGGGACCTCCAC
TGGACACCACCCCAGAGGCTCAGGATGCTTTCGAGGGAGGAAAGGAGAAAGACCTCTACTGAGGGAAC
AGCTGGCGTGTGTTGGCTGAGGTGACGTACAGGGGCAGAGCTTCGAGGGATTTCAGATGATCC

Fig. 5H

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METALS RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 52

pKVC20rB:

TAAATAGAAACGTATAAGAATAGTCAAACTACGTCTACGAAGTGTCAATATCAGGCAGGCGGCTCAAATC
CGAAGTGGTGTGATGAAAGTGTATTTAGTTGGCGTAAGAAGCATAACATTAGGAAAGTAGAGC
CAATAATTACATGTAGCCCATGGAATCCTGTGGCATGAAGAAGGTAGATCCGTATACTCCGTCCGAGA
TCGTGAATGATGTTCATAGTATTCTGGAGGCTTGAAGGAGTGTAAAGTAGACTCCTAAAGAGATTGTA
ATAAAATAGTGCTTGAAG

SEQ. ID. NO.: 53

>pKVC59BR

poly(T)GTTTTGTTTTAAAAATGAGTTCTTTAAAACCATGTCATACATTCCCCATACTGATATCG
CATGACCCNTTANAATAAAGGCAGGGGGNTTACTAATGGGGGGCGGGCCANACCCNCCATGTTCA
GCCAGACAGTTCAACCCGGGGNNCTTGTCTCGGACCTCCGGGNANGCCTTCCTTTCCAAAAAA
GGGGGCCGNTCGGAGNATGNATNTGAGGGCCCAATTAG

SEQ ID. NO.: 54

pKVC21B:

GCGCTCTGACCAGGCATCAGTTTCTGGTGTCTCTGGCTAGCCTGGTATGTAGGGCCAGGCAGAC
AGGCAGGCAGGGCTGAACAGGGTTCTGCTCCAGGAAGACCAACACAGAGGACCTTACAGGCAGG
AACCCCACAGACTGTCCAACCCACACACTCCACCACCTGTGCCCTGTCCCATGTCTGAGCCAAGGCC
TGAGGTAGAAAGTCACCTGATCTGTATCTCATAGGGCCTGACTTT

SEQ. ID. NO.: 55

>pKVC61BF

poly(T)CCCNAGNGCACACNGGGGGCCNTAANNAGNGGNTCCNAGNCNNAGNNTGAGGCATA
GCTTNAGNATTNCNATAGTGNANCACAAATAGCNTGGGNAATCANGNCAAAGCCNTTCCGTNGAA
ATTGTNATCCNNTCANAATTCCNCACAANATACGGGCCNGAAGCATAAAGNGTAAAGCCGGGGGCC
AANGNGGGNGCNAACTCACATTAAATNGCG

SEQ ID. NO.: 56

pKVC23:

GGGAAATGTAGTTGGATGCAAAGCTGATTAATTGGATCAAGAAAAATTGGAATTAAATACATACAAT
AATGCATGCATTATGGTTCTGATTTATATATCCTTAGCTAGTTGGAAATGATGATTCCCACAAACAA
GCATAACTCAGCTGTTCTGTTACTGAGTACTTCTCCTATGGTATATGTTGATAACATTCTCCA
TTATGTATGTTGCATACgAGAGTTACAGTTACT GTGGGAATCATAATT

SEQ. ID. NO.: 57

>pKVC9R

GTCACCATTAAATGTCTgAATTTaAACAGATTCTGGACTGGTGGCTCATATCCATCAGCTCGCTAA
CTTAGCACCGGTCTCATCCCCAGTAGCTTTCCAGAACTGCTACCTCACCATGAAGCTCCATGAGCT
TTCCAATTCAAACCTGGCTTCTCAGCATTTTACTTTCTAACGAAGTCATCATGAAGTGGATAAA
TAGACTGACAAGCCTCTATGTCCTTCCGATCTGCTGGAATCAATTATTGACAACCTCTTCAA
GTCA

Fig. 5I

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 58

pKVC28B:

TCATAGCATTCTCTGCTTCTGGATTATGTGCTACAAATGTGCTTGGCTTAGAAAGGGATGGA
TGAGAAGACAGAGCTGAGATCAACCTGGGTAGAAGCAGAAAGTTAACCCCTTAAAAGTGCTGAACACA
GATTGAAATCCAATGGTTCAAGCAGCCATGAAATCGCTTCTCATGAAGTGGCTTAATTCTCTAGTTT
AAGTTCTTTGATGGAATGAATTAATTATGTGTCAGGTGGCTTATTGTGGATGCATGATTGATGATG
TCATT

SEQ ID. NO.: 59

pKVC29:

CGGACCCGGACAGAAAGCAAATCCTGGAGCGCACCCAGCGTGCGGTGGGCTGGCCGCAGAGCCCCCTGG
AGAGAGCCGTGCGGgNCGGCCTCCCGCAGAGGAGGCGCCCGCTGCGCAGAGGTGTTGGAAAGAAG
CGAAAGATTGCTCTCCGACTGGTTGGACTCCACCCCTGGCAGCGAAGTTACGGACAATTCTATTTCT
CCAAACTGCCAAGTTCTGGGAAGAAGAATTCCACAGAGACATGGAAACCCCTGAACGTTCTCCCTCCGG
ACGTCC

SEQ ID. NO.: 60

pKVC38:

CGAATCTGTTAGCAGTTCAAATGATTGTTGGATATTGGATGTTAACCTTACCAATTGCTTGT
ATCGACACATTTCATTAAAGTGTAACTCATGTTACTGTTACTTAGGAATAATGCAAATCCAACC
TTCATCCAGTGTGAGAATAGCAGTATGATAGGAATTGCTCAATGTGCTTAAATGAGTAATTGCTT
ATCTTTTTAGTATCTGATAGACTTGTGATGACACGGTACACTCTAATTATGCAATTCTTAGTTCCA
AATCTAACCTAACGACATTCTATATTAACGTGATGGTAGCTGAG

SEQ ID. NO.: 61

pKVC48B:

GGTTTGCAGGGGCAAGTGGGCTGGGCCCGCTGGGTGAGAACCCGCCACACTGCAGTGGGTGCC
TGGACCCCGCAGCGCCTGAGCAGACGGTGGACTCTGGCTGTCCTTGGCCACTGGGGCC
GGCTCTGTATATAGCTGGGCTATGGGCTGACACGGTACACTCTAATTATGCAATTCTTAGGACACCTG
GGTTTACCCCTCAACTAAGGGAGGGTGGAAAGGGATTACTTGGGTCTCAATAATTACGATATCCCT
TTAAGGTTGACCATTAAACTGTCCCA

SEQ ID. NO.: 62

pKVC51B:

CCTCTTAATAACCTCAGGCCTGGCTATATGATTCACTACAACACTCAACACTGCTGTTAACCTTGGAAAT
AACTACCAACCTACTAACTATATCAATGATGACGAGACATTATCCGAGAAAGCACATTCCAAGGCCA
TCATACACCTATCGTCAAAAGGCCCTCGATACGGATAATCCTTTATCATCTCAGAGGTATTCTT
TTTCGCAAGGCTTCTTCTGGCCTTGTACCACTCAAGCCTAGCCCCAACCCCCCGTAGCTTAGGGGG

SEQ ID. NO.: 63

pKVC53B:

Fig. 5J

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 69

pKVC69:

TGGCTGTATCTGGAGGCTTCTGCCTCAGCTCTGAAGGCTGCTCTCATTCTTCTCGCGTGTCCCGT
CCATCTCAAATTCTCAATGGCCATCTCTCACGCCCTCCATCCCTGCCTTCTCCTGTGTTAA
GGTTCATGTGATTAGATCAAGCCCAGTATCAAGTCTCCCTATTTAAGGTAGTTCTGCCATAGAAC
TAACATAATCACAGGAGTGACTGCACAGGCACGGGTTCTGGGATTTGGGATGGAGTTGGGG

SEQ ID. NO.: 70

pKVC74:

ACGCTAAGGACACCTTTTGTGACCTGATGTTAGATGGCAACACCAAGTTCTAGAGCAATT
GAGAGACTTGTCCAAGGTACAGGATGGCTTACCTCAGCCAACATATAGTTGCAGTGACAGTATGTG
TGCTCTGTGAGGGTTACTGAAAACCCCTGTCAAATATTCCTGTGGACACTCAGCCTTAAACTCCA
AGCCTCATGAAGAACTTATTGGGGGGGGGGCGCTAAATAATTCAAGTCGGTTGAGCGTCTGACTTCG
GCTCAGGTATGATCTCACAGCTC GTGAGTTCGAG

SEQ ID. NO.: 71

pKVC86:

TGCCTAGAACATCATTGTTCTGTGGAGGTGTTTGATAGAACCGGCCAGTCTGAACCAGAAC
GAATGTTCCCTTGCTAAATGTTCTCACAGAGAAATGGACAAGCGTTTACAGGTATAAAAGGCACAAG
GAGGAACCTATTTTGGTCAGAGCATTGGGAAGTAAATACAAGGCAAAATAGATCTGTTGTTGTT
GTTGCGGGAGGAAGTATTAATAAGCAAATCAAATGCCTGTATGATCTCCAGTGTATAATTAGATC
CTAACTTGCAAATACATGTAG

SEQ ID. NO.: 72

pKVC96B:

ACTGGACCAAAATTGGTGTGTTAACCTTGACTCTCTTGTGATTATTCTAATGCTACAAGAAC
CTGTAAGTGTCTCTACAATGATGTAGCCCTGACAAGACATGTTGGCAGTGTATAAAATTAGGTAG
GATTGTGCACTGATTGACCAATTGTGAAATCTTCTCAGTGGTAAGTGCATTCTAATAAAATTAT
GNAGGTGAAACAATCTTGGNGCAATGGACCACTCATGCATCCATCCC

SEQ ID. NO.: 73

pKVC97B:

AACAGCCCCACTATCAGCACCCAAAGCTGAAATTCTTCTTAAACTATTCTTGCAATACCAGNAAG
CAACCCATAACTTCATAATTCTATATTGCATATAACCCATACTGTGGCTGGCCAGTATGCTTAT
TTCCCAACAAAAACCAAGTAANAAACCCCAAGTACCAACACACAAATGTAACACTCT
ATTAACCACANACCCACCCAGGTTGGTATTACACCCATGGNCATAAGGACATACTATGT

SEQ ID. NO.: 74

pKVC103rB:

CGCTGCATCTTCTATGCTCCCTGCTGGCGCTGATGGGAGATACAGACAGCAAAACGGACAGCTC
GTNTCATGATCGACTCGGACCCCTGCGNCTGCATGAGGCACCACTATGTTGNATTCTATCAGCTCACC
CGTTGNTACAAGTGTAGNCTCAAAGGAAGAATAGTGGGAGTCTCTGTGAGACCTATCTGAATCCCGN
NTGGCCCTGAGNTCCAGAGGGNCCTGGTGTCCCATGCCCTAGCAGGGTCAAGNAAGGGGCCGCN
CATGGCAGTCCTGGNCAGNAGNAANGANTGGNCCAACCCNNTGGTCCCAACCCA

Fig. 5K

SEQ ID. NO.: 75

Title: GENE SEQUENCING ASSOCIATED WITH NEURAL PLASTICITY AND METABOLIC RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

pKVC103:

CGGCCACTGGTCATCAGATGAGCATTTGTGTGTTGAAGCTAGTAGCTATAGAAAAGATAGTTGTGCC
CTGATAAAAGTAGCTTTAAAAAAAGTTGGGTTAGTTTACACATTCAAGGGCTTATGAAGAGATGCAA
GTCAGGATAACATAGGCTTGATTCTGGCAGCTTAATGAGTCCTCACGAGGCACTGAAGGTGGAAGGGTG
GAGTCCAGTAACTGCTCTGGAGCAGTGACTCCCAATTCTGACGATCTAACATTGTTCTGAAGGACG
TTGCCATCTTGACACAGGAACGTGCTGTGGGTGCCTGGCAGTGTCTGAGTAGACTT

SEQ ID. NO.: 76

pKVC104rB:

CGCTGCATCTTTCTATGCTCTCCCTGCTGGCGCTGATGGGAGATACAGACAGCAAAACGGACAGCTC
GTTTCATGATCGACTCGGGACCCTCTGCGTCTGCATGNAGGGCACCACCTACTGTTGGATTCTTATCA
GNNCAACCCGCCNGNTGCAAAGATGNTAGACTCCANAAGAGNAAGNAATNAGTTGGGNAGGTCTTT
CCTGCTGNAGAACCTAACCTGCAATTCCCC CCCCGCCCCCGG

SEQ ID. NO.: 77

pKVC107fB:

ATTACAACATCTAGAAGGCTTCATCATACGATACAAGCTCAGTTACAAATGTGCATCCTAGTATTG
GAAAACATAACCTCTTAATGTAACATGAAAAAAATTATTTCTTATGTCCTTTTCAGGACTCCTCTT
TTATTTTTGGTATTTATCTTATGGCCACCTTGGCCTTCTGCCAATGTGTTATGCAGTGAAAATG
CTTGTGGCAGAGGATGCCCTACAGCGAAAAATACCGCGCACATGGGTTCCCAGGTA

SEQ ID. NO.: 78

pKVC107rB:

TTTGTTTATCGTTATTAGTACATGGCGTCGGAGGATGATTACTCATCATCTGTATTACAG
AGGTAGAGCATAATGCCATCTGCTAGGGATCCAGTTGACAGCACCTAAACACTAGTCTGCTCACTC
ACCCTATAGGGCTGNTCATCCACTTGGGATGGAAGACAACAGTGCCTTAATGCAAATGGCCCCAG
GCAAGGAATTAACCATTGGCTCATGGCTCATGAAGGAATACAGNCNNATTAAANGCGNGGCAGGCAGG
AAGCCTTNGCTA

SEQ ID. NO.: 79

pKVC124:

CTAAAGTGGCTAACAGTATACCCACCCCTAGCCGGAACCTGGCTATGCAGGAGCATCGTAGACCT
AACTATTTTCACTACACCTGGCAGGTGCTCTCCTCAATCTTGGTGCTATTAAATTCTTACTACTA
TTATTAATATAAAACCTCCTGCCATGTCCCAATATCAAACACCTCTATTGTCTGATCAGTCTTAATCA
CTGCTGTCTTACTACTTCTATCACTCCAGTCTTAGCAGCGGGATCACTATATTATAACAGATCGAA
ACCT

SEQ ID. NO.: 80

pKVC24B:

GCCGGGAGCCGGCTTGGCGNGGGCGGAGAGGCCCCGGACGGTCGAGTGCTTCTCTGACTGGTG
CGAGAAGAACATTCTATATACTTCCAGGTGCTTTATATTCCCTTCGAGAAGAAAATAAATTATGA
ACTCAGGATTTGCAAGTATTCTGTGTTCTCTGGAGTAGGTAGTCCTCTTACCTCCATGATTGGATTGGAAAAG
CTGCTTTCTTGGTCCACTTTCAAGATTCAACATAGAGAAGCTCCTAGGATGCAGTCGTCTTCTG
AAGCGCTTCCAGGAAAGAAAGAAACT

Fig. 5L

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 81

pKVC25:

AGGTCTTAANCCAACCCCGTCCCACCCACAGGGTNCAGCGTGGTACTACAGGCAGCCCTCCCTATG
TCGGGTCTAGAACGCCCGAGCTGGAACGAAGGGAAAGAAGCTAATTACAGTGTCTTCTTGCAGTGAC
CNNCCCCCCCCCGCCCCCGCACCAGTCAGTCCAGGAGGGACTTGTAGCCGTAGCCCATCTT
CCCCACTATCCTGGCGTGTGGGCTGTGAATGCCTCTAGCCAAATCACTAGAGTGCAGTGACCCAG
CCTCCTTCGTGCCAAGATG

SEQ ID. NO.: 82

pKVC40B:

GCAACAAGGAATGAGACCCCCAATGCCGCCTCATGGTCAGTACGGTGGTCATCATCAAGGCATGCCAGG
TTACCTCCTGGTGTATGCCACCGTATGGCAGGGACCGCCAATGGTACCCCTTACCAAGGTGGGCC
TCCTCGACCTCCGATGGAATGAGACCTCCTGTAATTCGCAAGGTGGCCGTTACTGATCTTACTTCAT
CCAATCTAATAGGTTTGAGATTAAACCTTTCTCAACTTGTGCTGGTTATATAGCCAAGCTTCCGTC
AATAAGGCTTATTGTTGACTTTAACAAACATTATATTACACATACCAGGGACTATTGGACAATTATT
TTACAAGGGAAAATT

SEQ ID. NO.: 83

pKVC43fB:

CCTGGCTGCCTGTGCCTCAACCCCACTCCCAGGGAGACCAAAAGCCTTCATACATCTAAAATTGGGGGG
GGGGGGGGGGACAAAAAAGGGGGCCCACGATGGCAGACCATTGAAATAAAACAAAAAGACCAAGTTTT
AAGGCGAGAGTTAAAAAAAATTGGACTACATAATTACACCAAGGCAATGTTATCACCTGCGCCTG
TTTGGACTTGGCGGGACTGGCCTCTCCTCAGGGGAAATGGGTGGCTTTGGGAAGGCAAGGGA
CTTCCTGTAAACAATGCATCTCAGGGTATTGGATGACTATTAAAAAAAAGGGCCAATGTTACAGTC
AAGGTCTGGGCCA ACCTTGGAACTTTGGGGGT

SEQ ID. NO.: 84

pKVC55B:

CCCAAACATCTACAAACACAACAAACAGAAAATAAAACAAACATTAGTCACCTTATAAAAGTAT
AGGAGATAGAAATTAACTTGGCGCTATAGAGAAAGTACCGCAAGGGAAAGATGAAAGATAAAATTAAA
AGCACCACACAGCAAAGATTACCCCTGTACCTTTGCATAATGAGTTAGCTAGAACACCTAACAAAG
AGAACCTCAGCTAGGCCCGAAACCAGACGAGCTACCCATGTACAATCTATTTCAGGGGTGAAACTC
CGTCTATGTTGAAAATTAGTGAGAAGGTTTTGGTAGAGGTGAAAAGCCTATGGCCTGGTAG
CTGGTTGCCCGAACCGGATTCTTAGTTCACCTTTAAACTTCCT

SEQ ID. NO.: 85

pKVC57B:

GCGGAAGCAGTGTCTCCAGCCTGCAGAGGCCCCCTTCCCCAGCCTGGCCAGCTCCGGCCGGCCCC
GGGCTGGACTCCTCTACACGATTATTGACGTTTATTGGTTCCCCACACCCCTCAATCTGT
CGGGGAGCCCTGCCCTCATCTGCTCCCTGGCCAGGAGTGAGTGACCCATGGCCTGGCGAAATTG
TCCTCCTCTTCTCCCTCGCACTACAGTCCTGGTCGGGAGAGGGTGGCGGGTAGCTGTTGTGGTTAG
TGGGTTTGGTTGGTTTTGTCTTCTTCT

Fig. 5M

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 86

pKVC60fB:

AAAGGGTGGGGCANTTGTGCTGGTTCTCCTCTGCGTTTCCGTAAATTCTTCTTACTAGGGCTTA
TAATTCTAACTTTCTGGTAAGTAGTAATATAAAACACAATCAGGAACACTCTTCTTCAAGTAG
GATGCAATTAGTCCAAGTTGGATGCTGGATAACTTGTCTAAAGATCTCCTCTCGTGGTCA
GTCCAACATTCAAACTGCCTATCTTATAAACTTCATAGGATCTCCATGAGTCCATTATGTTG
ATGAATTGACTCGTCTGTTCTGCATCAACATCATAGGTGGATCACAGAGAGTTGCCATTGTT
TTCTCATTATTCTCCTCTCAGAGAGCCATCAATAATTTCAG

SEQ ID. NO.: 87

pKVC60rB:

GTTTCCAGAAATTGAAAACAAAGAGAACACAAGAAAGGTTAGCGAGTTGGCAGAGGGAGCTGG
TCTTCAGCCACGATTGCTAGGAGCGAGCATGAGATTCTGAAATTATTGATGGGCTCTGAGCAGGA
GAATAATGAGAAACAAATGCGGCAACTCTCTGTGATCCACCTATGATGTTGATGCAGAACAGAGACG
AGTCAAATTCAACATGAATGGACTCATGGAAGATCCTATGAAAGTTATAAAAGATAGGCAGTTT
ATGAATGTTGGACTGACCACGAGAAGGAGATCTTAAGGACAAGTTATCCAGCATCCAAAAACTT
TGGGCTAATTGCATCCTACTTGGAAAGAAAGGTGTTCTGATTGTGTTTATATTACTACTAACCC
AGGAAAATGGGATTATTAAAGGCCTAGTAAGGAGGGATTACGGGAAACCGCAGAGGAAGGAACCCGC
AGGCAATTGCCCTTGG

SEQ ID. NO.: 88

pKVC63B:

CCTACCCGGTTTGGATAATCTCACATATTGTTACCTACTATTCAAGTAAAAAGAACCTTGGCTA
CATGGGAATAGTTGAGCCATGATATCAATCGCTTCTGGCTTATCGTATGAGCCCACATGTT
TACTGTAGGAATGGATGTAGACACACGAGCATACTTACATCAGCCACTATAATTATTGCCATTCTAC
CGGGGTGAAAGTATTAGTTGACTGGCTACTCTCATGGAGGTAAATTAAATGGTCCCCTGCTATATT
ATGAGCCTAGGCTTTATTCCATTACCGTAGGAGGGCTAACGGGATTGTACTAGCAAACCTCT
TCACTAGACAATGTTCTCACGGCACATATTACGTGGGGGCCACTGTCACTATGGCTGTCAATAGGG
GCAGTATTGTTACAGGGGGTTCGTCC

SEQ ID. NO.: 89

pKVC64B:

GCAATCCTGGCCTGGGGCCTGAGGCCCTCCCTGCTCCAGGCTGTATCTCTGCCCTCTCCTCC
GGCCTCCTCAGTTTGCCTGCAATTCAATTGAGTTACTGTTATGCTAAGCATGACTCTGACTT
GTCACTGACTTCTCTGGAGCAGGTGGCTAGAAAAAGAGGCTATGGGTGGGGAAAAAAATGTTCTG
TTCTCACTGTAAGGCTGGTTTGGCTTCTGCCATGGATTCTCCCCCTGACCTCTCCCTCAGCA
ATTCCGTCAAAGGGTAAAAATTAACTGGTTTNAACTACTGATGGACTAAACAACACAAAGGATG
CTGGGATGCTAATTGGTTAACTAAACCATCAAGGTTGACCAAGTTGGATTGGTAACTGGTAAAT
ACAAGTA

Fig. 5N

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 90

pKVC66B:

CGTATGAGGCAGTCCCCCTGCTGCCCATCCCCACTGTCAGGTCTATGGGTCCGTGGCCAGAATGGG
GTGGAATTGGGTTGAGGGAGGGACAGCCCTGGCTGACAATGATATTGGTGTAAATCAACATTAACCGAGC
CGGCTTCAGCTTACCTAACCCGGGAGGACACCACCTTGAGAAACCACAAGCTGGAGCGACCCCTC
AGGCCCTGCAGGCCTTGCACACAGCCCTGGGTGGACCCCCACACCAGTCCTGTTAGCCAGCTAGGCCA
GTCTTCCTTCAGCACCAACTTTATCCTGGCAGGTTCTGTCAGGTGAAAGCTGGTAAAAGCGGGTC
CCAGCCAAGGGCTTCAGGTTCAGGCCAGCAGTAACCTCAATTCTAACGGTGGCAGGA

SEQ ID. NO.: 91

pKVC82B:

GCCACCTGACCCCTCTAACCCATGGCTGTCGATGACTACTTCTGGAACTTGNAAGCAAGCAAAG
AACCAAGTCAGCAGAGGGTAAACGATGGGGTTTGGCATGGATGAAGCATTGAAAGACCCAGTTGGGA
GAGAACAGTTCTAAATTCTAGAGTCAGAATTCACTCAGAAAATTAAAGATTCTGGCTAGNCAGTG
GAAGNACCTGAAAGNAAAAGGTCTAATNAGGAGAAAGTCCCTCCGGAGATTCAAGGGAAAATATGG
GCAAAGNAATTCTGGCTCCCTGGAGGCTTCCCAGNTGCCAATCAAACCTGGGTTTCCT
NAAGGAGGCTNATGGATT

SEQ ID. NO.: 92

pKVC110

GAGAAAGACATAATGGTTATGGCATTGGCTTGAAACCAGTTAAAGAGGGTCGATTCTTCTTCTTA
TTTAATAGTACGTAAGTTGGCTTCAAATGTGTGGTACGGAGGAGGACATC_cATGCAATCATTCAAG
ATTAGTTGTGGTTAATTCTACTATGCCACTTCTCGCTTGA TGGCAAAGCTTCT

SEQ ID. NO.: 93

pKVC134: Homologous to human alpha tubulin; Accession HSHA44G

CCGCCAGTGTGCTCTAAAGTGTGGTACCCCTGGTGGAGACCTGGCCAAAGTACAG
CGAGCTGTGCTGAGCAACACCACAGCCTTGCTGAGGCCTGGCTCGC
CTGGACCACAAGTTGACCTGATGTATGCCAAGCGTGCCTTGTTCAGTGGTATGTGGGTAGGGCATG
GAGGAAGGAGAGTTCTGAGGCCGTGAGACATGGCTGCCGTGAGACATGGCTGCCCTGAGAAGGA
TTATAGGAGGTTGGTGTGGA

SEQ ID. NO.: 94

pKVC108: Homologous to Mouse Initiation factor eIF-4A;
Accession MMEIF4AL

TCTTCTCCAAAAACACTAATCCATGTCCGTAAACCACTCAGCCTCCAGACCCAGAGGGCTCTCCCCA
CCCAAGCTGCCACCTCTAAAGAGGATTCAAGGGCTATAGTGTcACCCAAACCTCATTGCTGGACCAAA
TCTGGAGAACCC TTGAGCTAGGTGGCCcATGGGTTGTCCcAGGTGGGGAGCAGGGAGAGAAAATG
GTAGCCATTTCACATTGTTGTATAGTATT ATTGATTCAAGG

Fig. 50

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 95

pKVC105B: Homologous to Human mRNA for prolif. associated protein;
Accession HSPAG

GTCAGACACAACCTTCTGAATCCTCTNAGGANGGTGATCCAGTTCATGAANATTCTCTGTAAAATNANT
NTGGNAAACTANATNAGTGNNGATNCAGGTCTNGAGNNCTCCTCCAGTGNCTAAAAGTNCACAGAN
GNCAGGAACTNCTATCTGCATGCAGTCACCAGTTCTCATNC TCTANGCA

SEQ ID. NO.: 96

pKVC92B: Human Mitochondrial hinge protein; Accession HSHINGE
CCCAGCCTTCATGAGCTGGTCATCAGGATACTTCTTATGGGNTNGANCATGCCANTGCTTNTNCNG
TANATGTAAGTTCATGNCAACCNCATTTTTCTAGCCTNNGNCTNAAGGTNANTCGTCTCNTTANG
CAGCNGANNCAGTTGNAGTCTNTCAAANGNNACAAANACCTAA

SEQ ID. NO.: 97

pKVC91: Homologous to Bovine NADH dehydrogenase; Accession MIBTXX
GGGTTAAGTGATAGGAGGAAGGGCTGAGTAGGTGGAGGgCTATTAGGGCATTTCCTCGGTGTAATG
ATGGGTTGATATTTAATGTGGTGTGTATTGCCTCGTTGAGTTATAATAAGTATGTAGAGGgGT
ATAGCCCTGTAATGATGATATTAGTACCCATTAGGATAATGGTTATGTTGATCATGAGAAGGAGGCTA
TTACTAC

SEQ ID. NO.: 98

pKVC90: Homologous to Human hnRNP core protein A1; Accession HSRNPA1
ACAACCTTGGCCGTGGAGGAAACTTCAGTGGCGAGGTGGCTTGGCGGCAGTCGAGGTGGTGGAT
ATGGTGGCAGTGGGATGGCTATAACGGATTGGTAACGATGGAAGCAACTTGGAGGTGGTGGAAAGCT
ATAATGATTTGGCAATTACAACAATCAATCTCAAATTTGGACCCATGAAAGGAGGAAATTTGGAG
GCAGAAGCTGGCCCTATGGTGGAGGCCAATCTT

SEQ ID. NO.: 99

pKVC86B: Homologous to Rat Ribosomal protein S27; Accession RRS27
GCGAAGGACCTCCTGCACACGTCCCCGGAAGAGGAGAAGAGGAAGCACAAGAAGAAGCGCCTGGTGCAG
AGCCCAACTCCTACTTCATGGACGTGAAGTGCCGGGTGCTACAAATCACCACCGTGGTCCCT

SEQ ID. NO.: 100

pKVC82: Human Carboxypeptidase E; Accession HSCARBE
ATCTGCCATTTAGACTAAAGGAAATATCCACGTGTTATTCAGATCCAGAAGTTTGAGTAATT
TGGCTTTAAAAACTAATGAAGTCCTTTAGTGTAAATGGTAACAGTGCCACATAGTGAATGCCACTGAA
AAGGTCAACAGCTACATTTGGTGTGAGCATTACCGCAAGACTACATAGTTCACTATAA

Fig. 5P

SEQ ID. NO.: 101

pKVC80: Homologous to Rat VAMP-2; Accession RNVAMPB
GGTCCTGTATCACTTTCATTGCATGACGTTCTTGAGGTGGGGAGCCTGGCTTTGGGAGCC
AGAACCTTCTGGCCCCAGAACATACCCCCCTCTAGCCCCCTCTAGTCCAGTTGCCTCCCTGCCCCCA
TTTCCAAACCTCTTGTCCCCTCCCTCCCCCTCCCCCAGCTGGTGTGGAAGTGTCTCGGAG
TTCAGTGTATGAAGGACAATAGTTGACTGGAGTT

SEQ ID. NO.: 102

pKVC79: Homologous to Bovine Nuclear encoded ADP/ATP transporter;
Accession BTADTPMT
GGATGATTGCCAGAGCGTGACAGCGTCGCAGGGCTGGTGCCTACCCCTTGACACTGTCCGCCGTA
GATGATGATGCAGTCTGGCCGGAAAGGGGCGGATATTATGTACACTGGGACGGTGGACTGCTGGAGGAA
GATTGAAAGATGAGGGAGCCAAGGCTTCTCAAAGGTGCCTGGTCAATGTGTTGAGAGGCATGGG
CGGAGCTTCGTATTGG

SEQ ID. NO.: 103

pKVC59B: Homologous to Rat scg10; Accession SCG1_RAT
ACGACTCACTATCAGGGCGAATTGGGCCCTCTAGATGCATGCTCGAGCGGCCAGTGTGGAAAAGG
AGAGGCATGCCGCGGAGGTGCGCAGGAACAAGGAACCTCCAGGTTGAACGTGCTGGCTGAAACGATGGAG
GGTATGGCACGCCACCATTAGTAAATCCCCCTGCCTATATTATAATGGTTCATGCGATATCAGTATG
GGAAATGTATGACATGGTTAAAAAGAACTCATTATAAAAACAAAAACAAAAACAGAACATC

SEQ ID. NO.: 104

pKVC55: Homologous to Human LAMP-1; Accession HSLAMP1A
AGCATGCTGATCCCCATTGCCGTGGGcGgCCTGCGGGGCTGGTCTCATCGTCCTCATGCCCTACCTC
ATCGGCAGGAAGAGGAGGCCACGCGGCTACCAGACGATCTAGCAGGGCTGCGACACGTCGGCCGGCTGC
CACTCCGGCTCCGCTCGTCCCTGAGCTTAGGTTGGCGTGGAGGGCGGACGTTCTGCAAACG
ATTTCAAATCTGCTTATCGATGTGAAGTTCATTTGCAACATTACTATGCACAAGAGTATTGAAA
TGAC

SEQ ID. NO.: 105

pKVC49B: Homologous to Chicken Contactin; Accession GGCONTAC
TTCATTATGAAAATATCAATAATATGTCATTAGTTACATTCAACTCTTGTATAAAATTAAACTTT
TTAATAATAAGTGAATGGGTGATTCCCCCTGGAGGGATGTCAACAGGCTAAATCTTCAACTTTGGGAACGGATACTGTGT
TCATAAAATACAAACTCCTTGAAAAGGGACAAATCTCTCATACTTTGGGAACGGATACTGTGT
AAGCCCTCTGTACAAAGTTGGGTTTCATTGTTACACTTTGGGGTTCCCTTCAAGGGGCC
CCTGTGGGGGGTTTTTTTATGCGGGCAACCAACTAAATTTTTCCCAAATGGAATGCCCGCCC
TTTTTTTCTAATGTTTTGCAATAAGGGGGCAAAACGGGGGAGGGTTTCCATGAAAAGGT
TCCTTAAGGGTGAAGGGGAACCACGCTTGGGGGGGGTTTCCCTTTAAGTTGTGGCCCCAGTAGGG
GGGAGAAAGCCCTCCCCCGGGAAACCAGGGTTGGTCCCCACGG

Fig. 5Q

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 106

pKVC47B: Homologous to Human 71 kD heat shock cognate protein:

Accession HSHSC70

CCTGAGAATAGGTCTAGCATTGTCACACAAAACATTGAAGGACCCAAATTGTAGCAAATTCCATG
GCAGTGAAGTTGAGCTGCTATAGTTAATAAACTGGGCATTCTTGATACTTGAATATGGAATATGTGCAC
AAGGAAAGTAAATACAACATTGCACTTATAAGCACTGTATTGTTAAGTGGAAATGCAATGTCTTAA
AATAAAACTGTATTAAAATTGGCGCCCCAAAAA AAAAAA

SEQ ID. NO.: 107

pKVC46B: Homologous to Human 71 kD heat shock cognate protein:

Accession HSHSC70

CCTGAGAATAGGTCTAGCATTGTCACACAAAACATTGAAGGACCCAAATTGTAGCAAATTCCATG
GCAGTGAAGTTGAGCTGCTATAGTTAATAAACTGGGCATTCTTGATACTTGAATATGGAATATGTGCAC
AAGGAAAGTAAATACAACATTGCACTTATAAGCACTGGTATTGTTAAGTGGGAATGCAATGTGCTTA
AATAAAACTGTATTAAAATTGGCACCAA

SEQ ID. NO.: 108

pKVC35B: Homologous to Human Vacuolar proton ATPase channel:

Accession HSPCHSUCA

CTTAGAGGACACACACNCACGGGGCCGCCGCCCCCAGTAGTCGGTCTGTAAATGCGCAGTGTCTA
GTGCCCGTTGCTGCTACCCGGCCTCGCCCCCGCCCCGTGCCGTGGACATCCGGGCCCCACTCC
TTACCCATCCGGGCTCCGGCCCCACTCATCTGCCCTAGAGCGCTCTGTAGAAGGGTGAATTAGAGTT
GTATTCTCTCACTGGATGTTCTTATTATA AAGATTGATCTGTTC

SEQ ID. NO.: 109

pKVC27B: Homologous to Rat Cytoplasmic Succinyl CoA synthetase:

Accession RNGLTA

GCGACACGTTCTGTCATTATGTTCTCCTCTTGTGCTGCTGCCATCAATGAAGCTGTTGAGGCG
GAAATGCCCTGGTTGTCATTACTGAAGGTATCCCACAGCAGGACATGGTGCGGGTCAAGCACAAA
CTGCTGCGTCAGGGAAAGACCAGGCTGATCGGGCTAACTGCCCTGGAGTGATCAATCCTGGAGAACATGC
AAAATTGGCATCATGCTGGCCATTACACAAGAAAGGAAGAGTTGGTATTGTGTCCAGATCTGGG

SEQ ID. NO.: 110

pKVC22: Homologous to Human c1q beta isoform; Accession HSC1QBR

GGAAAGATGGGATTGATGAAACACTGCATTCACAGCAAAGACCTCAGTCAGACAAACACAGGGG
ACCAAGTGGATTCAGGTGTGGTCAAACACTCTGGGATCACAGTGGGATACCACCTCAGGGCTGGTGA
CAGATTCAAGGACCCCTCTGGCACACCCGGGACCCCAGGGATAAAAGGAGAGAACAGGGCTGCCAGGGCTG
GCTGGAGACCATGGCGAGTTGGGGAGAAGGGA GACCAGGGATTCTGGAATCAGAAA

SEQ ID. NO.: 111

pKVC22B: Homologous to Human Phospholipase A2; Accession HUMPHPLA2

TTCCAGACGGGAGATTGATTGGAAAAAAAGTAATGTGTTCCATTAAAATTGGTATATGGCATT
CTGACTTAGGAAGCCACAATGTTTGTCTGGCCCATCATGACATTGGTAGCATTAAGTTGTGC
TTCAAATCACTTTGTTAAGGATTCTGATCTGTTAGCCTGCCTCAATTGATCTTAT
TCTTCTATTGTCAGGTGTACAGGATTACCTT TTTAGCCTCTGTCTT

Fig. 5R

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 112

pKVC21: Homologous to Xenopus *nrp-1b*; Accession XLNRP

ACCCCTTCTATGTTTATCTAATTaTTTGTTGTTAATATGGTAAATAATTAAAAGTCAGGTAA
TTTAAATATTAAGATTCTGATTATTGAGCTTGTACTTATGCCACACGCTTATGTAATGAAAGTA
GCACCATGGTGAAGTGAACAGTTGCTCAGTTGTAACAGTTTGATTATTCTTCTTGACCTCT
TTCCCTTATTGTCTGAACCATAGCAAAAGGATACTGCATCTTAATAATTGAGTGCTGAGGTATT
GAaGTTATAT

SEQ ID. NO.: 113

pKVC18: Homologous to Human Cytochrome oxidase I; Accession MIHSCG
GTTATATTGACTCCTACAAACATAATCGTAAAGTGAATCTTGCTCAAGTGTGCAAGGGTATATCCT
GAGAATAGGGGGAAATCAATGGACGAAGCCTCTATGATAGCGAATACTGCTCCTATTGACAAGACATAG
TGAAAGTGGGCCACTACGTAAATGTGTCGTGAAGAACATG TCTAGTGAAGAGTTGCTAGTACA

SEQ ID. NO.: 114

SEQ ID. NO.: 115

pKVC12B: Homologous to Human 90 kD heat shock protein;

Accession HSHSP90R

ACGCTCGTTTCAAAGAGAAGAGCGTTAGAGTAGCGAAATCGAAGGCTGCTTAGGCGATTGT
AAAGCTTGGGAAATACTCCACAAGTTCGTGAGTGGAAATGTAGTGCTGAAACACATTCTGCTT
TAAAAGTTGTAACAAATACAAACAAATTAAAAAGCTGACAAATGTTGTGTGGGAAGCGGG
GTTCCAAAATACAGGGCGGCC

SEQ ID. NO.: 116

pKVC10B: Homologous to Human Cytoskeletal gamma actin;

Accession HSACTCGR

TTGTCTCTTCAAGAATTGACAACAGATTTGGTTTCTACTGTCTGTGGAACATT
AGGCCCGAGCTTGGCTCCTGTGCGAGGAAAATAAA

Title: GENE SEQUENCES ASSOCIATED WITH NEURAL PLASTICITY AND METABOLISM RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ ID. NO.: 117

pKVC9: Homologous to Human v-fos transformation effector; Accession HSFTE1A

GCATCTGATGGCCTTAAGGTCGTGTTGAAGTAAGCCTGGCTGATTCAGAATGATGAAGTTGCA
TTAGGAAATTCAAGCTAATTACTGAAGATGTTAGGGCAAAACTGCCTGACTAATCTCCATGGCATG
GATCTTACCCGGGACAAAATGTGCTCCATGGTCAAAAATGGCAGACCATGATTGAAGCTCACGTTGAT
GTCAAAACTACCGATGGGTATTCGTCCTCTTTGTGTCGGTTTACTAAAAACGCAACAATCAG
A

SEQ ID. NO.: 118

pKVC6B: Homologous to Chicken Amphiphysin; Accession GDAMPHIP
CCTTCCAGAACCCCTGAGGAGCAGGATGAAGGCTGGCTCATGGCGTGAAGGAGAGTGA
ACCTAGAGCTGGAGAAATGTCGGGCGTCTCCCGAGAACCTCACCGAGCGGGTCAGTGAGGGCAGC
AGCTGCTGAG

SEQ ID. NO.: 119

pKVC6: Homologous to Human TAPA-1; Accession HSTAPA1
TCTACGACCAGGCCTTGCAGCAGGCCGTGGTAGACGACGACGCCAACATGCCAAGGCCGTGGTA
CCTTCCATGAGACGCTCACTGCTGTGGCTCCAGCACGCTCTCCCGCTGACCACCTCATTCTCAAGA
ACAACCTGTGTCCTTCAGGCAGCACTGTATCAGCAACTTCTCAAGGAGGACTGCCACCAGAAGATCG
ATGACCTCTCTCGGGAAAGCTGTATCTCATTG GCAT

SEQ ID. NO.: 120

pKVC4B: Homologous to Rat alpha internexin; Accession #RNINTLAA
CACCTAAAGAGTTGCCAGGTCTCTGCACACATCTCCATTCAACACAGATAGGGTGTATGCTTTACT
AAACTTTCTTATCCTAGGACCTGCTGCAATGGTTCAAGGAACTGGAAAGATGCTTCTCTTCTCCTT
CCCTCACTCCATCCCTGTCTTACTCCTCAGACTTCCTGAAAACATTAGTAAGATAAGAATTAAAAGT
CACACGAATCCAC

SEQ. ID. NO.: 121

>pKVC154

ATTGGCTCAGTGGCAGAGCGCTGCCTAGGAAGAGCAAGGCCCTGGGTCGGTCCCCAGCTCCGpoly
(A)

SEQ. ID. NO.: 122

>pKVC159

GGGAGGAGGAGGAAGAGGAGGAAGGGAGGAGGAGGAGGAGGAGGAGGCTGCAAAGGCTCTGGCTCCTCTpoly
(A)

SEQ. ID. NO.: 123

>pKVC151

GTAATTATTGGCTCAACTTCTAATTGTCTGTCTACTACGACAACATAAAATCCACTCACATAAAA
CATCATTCCGATTGAAGCCGAGCATGATACTGACACTTCGTAGATGTAGTTGACTATTCTATAC
GTTTCTATCTATTGATGAGGATCCTpoly(A)

Fig. 5T

SEQ. ID. NO.: 124

>pKVC158

GATTTGGAGAACCTCGCATAAAAGAGAAGTACGCTCAATTCTACTCCTCAACTAACCTAGAAT
GACTGCATGGATGCCCGACCCCTACCAACACATTGAAGAACCTCCTACGTAAAAGTTAAATAAGAAA
GGAAGGATTGAAACCCCTACAACTGGTTCAAGCCAATTCTATAACCATTATGTCTTCTCAATpoly
(A)

SEQ. ID. NO.: 125

>pKVC160

AAGGATAATGCTGTTATTAAAAATATACTCAGGAAGTCAGGGTATTGATGCAATTACATACGCCT
TGGGTAGTCTGAAGTCCATTATTCAGCAGTTATATAATGTTCAGATCAAAGAGAAAGAAAACA
CTTACAGAGACCAGCAGTTGCTTACAGTTGGTCATGAGTCTGCTGTAGAAAAATAAAACTCCCT
CTTGCATTGCTGAAGAATGTCCTT

SEQ. ID. NO.: 126

>pKVC157

CAGCTCCCTAGTACTTACTATTATTCACTAATACTAACAAACAAAACAAACACACACAAGCACAATAG
ACGCCAAGAAGTAGAAACAATTGAACAATCCTCCAGCTGTCTTATCCTAATTGCCCTCCCT
CCCTACGAATTCTATACATAATAGACGAGATTAATAACCCAGTTCAACAGTAAAACATAGGACACC
AATGATACTGAAGCTATGAATATCTGACTATAAGACCTATGCTTACTCCTACATAATCCC

SEQ. ID. NO.: 127

>pKVC156

CCATGCTTGTGACAGACATACAGCCACTTCAACTAAAGCAAGCCTCTGCTTCTGCTACCTGCATGGA
GCCCACTGTGACACTCAGACCATCCCCGGTCACTCACTCGTGTGAGAATCTCAGTGAGAGCTGCCCT
TGTACGGACGGAAAGCCAACACAGCCACCTCTGACCTGGCTCCCCACAGCACCCACCCCTCCCTGCATG
CAGCTGCCCCGCTAACCCCCAATGTTATGTTACACTGTGTAATCCCCACTGCTGCCGTGTGGGTT
GTGTACGTGTCATGTCCTGGTTATAACTATGGTCGGTCGGGAAGGATTCTGTAATGCTGCTAA
GA

SEQ. ID. NO.: 128

>pKVC153

CCTAGACTCACAAGTAATACTAATATCTTATTGACCCATTATTGATCAACGGACCAAGTTAC
CCTAGGGATAACAGCGCAATCCTATTAAAGAGTTCATATCGACAATTAGGTTACGACCTCGATGTT
GATCAGGACATCCAAATGGTGAGAAGCTTAATGGTTGTTCAACGATTAAGTCTACGTGA
TCTGAGTTCAGACCGGAGCAATCCAGGTCGGTTCTATCTATTACAATTCTCCAGTACGAAAGGAC
AAGAGAAATGGAGCCTCCTTACCATAGTGCCTCAACCAATTATGpoly(A)

SEQ. ID. NO.: 129

>pKVC152

GCTTCAATTACTAGTCACTTATATAAAAACACCTAATGGCTAAAACAAATAATGAACTAA
AAAATTGCGTTGGGTGACCTCGGAGAATAAAAATCCTCGAATGATTTAACCTAGACTCACAAGT
CAAAGTAATACTAATCTTATTGACCCATTATTGATCAACGGACCAAGTTACCTAGGGATAACAGC
GCAATCCTATTAAAGAGTTCATATCGACAATTAGGGCCCACGACCTCGATGTTGATCAGGACATCCCA
ATGGTGAGCTATTAAATGGTTGTTCAACGATTAAGTCTACGTGATCTGA

Fig. 5U

Title: GENE SEQUENCE ASSOCIATED WITH NEURAL PLASTICITY AND METALS RELATED THERETO
Inventor(s): Max Cynader et al. Serial No. 09/301,507 Docket No. 230018.401c1

SEQ. ID. NO.: 130

>pKVC161

AGAGATATCGAACCCCTCTACCTATTATTTGGAGCCTGAGCAGGAATAGTAGGGACAGCTTAAGTATT
CTAATTCGAGCTGAACTAGGACAGCCAGGGCACTCTAGGAGATGACCAAATCTATAATGTCATCGTC
ACAGCCCAGTCATTGTAATAATTTCTTATAGTAATACCTATAATAATTGGAGGCTCGGGAACTGA
CTTGTACCACTAATAATTGGAGCCCTGATATAGCATTCCCACGAATAAAACATAAGCTTTGACTG
CTTCCTCCATCATTCTACTCC

SEQ. ID. NO.: 131

>pKVC162

GAGCTGTTGCCAGTGAAAGACAGCAAACATGGACACTCTGCACGTGCATCACAAAGCTAACAAATC
GAAATCTTGAATGCAGTCTGCTTAAGTCCAGGCAAGTGACAGCCATGTGTCTGCAGTGCTGTCA
CCACGTCTGCATTGTTGGAGCTGCTGCAGGGACACTGAGATGAGCAGGTTCTTGGAAAGAACTGTTG
TGCTCCTCAAAGCAGTGTTCAGATTTAAAGGTTCTAGCCTCCTAGTTCTATGTGGAACGTAGG
ATCCCCCTTCATAAATTTAAAGTGCTTATGTGATCCAATTGGTCTACATTT

SEQ. ID. NO.: 132

>pKVC36BR

CTTAGAGAAGGCAGGTCTTACAAACACTACAGAAAAGCCGTTGGACGTAA
AAATCCAAGGAGAAAGGAGTCATTAGGAAATGTAACATAGGACACAGAACG
CATGTTGTGTGATGGTCCCTCTCTCCGTGTGGTTCCAGAATATGCTCCTGAC
CCCAGAGCCGCCACCTGAGCGCGACCGGGAAAGGTACAGACGACTTCAGGC
TTCAGGCGCAACGTC

Fig. 5V